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EXHIBIT B
OLD INLAND PIT
SCOPE OF WORK
REMEDIAL INVESTIGATION - PHASE 1

The Scope of Work and Schedule (SOW) is to be used by the Potentially Liable Parties (PLPs) or their consultant to implement a Phase 1 Remedial Investigation for the Old Inland Pit site (Facility). The PLPs shall furnish all personnel, materials, and services necessary for, or incidental to, performing the Remedial Investigation - Phase 1 (RI-1) at the Facility.

The purpose of the RI-1 is to determine the nature and extent of releases of hazardous substances (as defined by (RCW 70.105D.020(5))) from the Facility (as defined in RCW 70.105D.020(3)). The information and data provided by the RI-1 investigation will be used to identify additional information necessary for a Remedial Investigation - Phase 2, outline appropriate Remedial Action alternatives and/or support a "No Further Action" option.

The objectives of the Remedial Investigation - Phase 1 are as follows:

- Review and compile existing facility and regional information and data;
- Develop Public Participation Plan
- Conduct necessary field investigations to define the nature and extent of contamination. Field investigations will include:
 - quarterly ground water samples and analysis from on-site monitor wells for one year;
 - soil sample analysis, as necessary, to enhance existing data and evaluate compliance with Model Toxics Control Act (MTCA) cleanup standards (Chapter 173-340 WAC);
 - biological tests (WAC 173-303-110(3)(b)) of baghouse dust deposited in pit to determine Dangerous Waste designation as per Chapter 173-303 WAC (Washington State Dangerous Waste Regulations).
- Identify Applicable State and Federal Laws (ARARs)
- Prepare baseline cleanup levels analysis/baseline risk assessment



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- Draft Remedial Investigation - Phase 1 Report which includes evaluation of the nature and extent of contamination, an ARAR analysis, a baseline cleanup levels analysis, and recommendations for additional remedial activities, if necessary.

Task I: Review and Compilation of Existing Site Data

Pre-remedial investigation data has been collected at the site by the Facility owners, EPA, Ecology. The PLPs shall compile and evaluate all existing information and data. The data will be used in conjunction with data collected from RI-1 investigations to characterize the site and determine the nature and extent of contamination. The existing data and results of the evaluation will be included in the RI-1 report.

Soil and ground water contaminate levels exceeding MTCA cleanup levels (Chapter 173-340 WAC) should be identified by concentration and location. Additional sampling may be necessary to supplement existing data in order to fully evaluate contaminant levels.

DELIVERABLES: PRELIMINARY BACKGROUND REPORT - DRAFT

TASK II. Public Participation Plan

A Public Participation Plan will be developed to provide the public with timely information and an opportunity to participate in accordance with WAC 173-340-600. A model Public Participation Plan, dated October 24, 1991, is available from the Department of Ecology for use as the format for the Public Participation Plan.

DELIVERABLES: PUBLIC PARTICIPATION PLAN - DRAFT
PUBLIC PARTICIPATION PLAN - FINAL

Task III: Facility Investigation

The purpose of the RI-1 Investigation is to obtain the information necessary to supplement and verify existing data. The existing and new data will be used to characterize the site and define the degree and extent of contamination. The facility investigation will consist of sampling and analyzing ground water, soils, and baghouse dust. The following investigations are required as part of Phase 1 - RI, Task III:

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▪ **Ground Water**

The PLPs shall collect samples from the four on-site monitoring wells on a quarterly basis for one year. The samples shall be analyzed for metals on the EPA Target Compound List and include aluminum, manganese, iron and thallium. Both total and dissolved analysis shall be conducted. All analysis shall provide method detection limits below Model Toxic Control Act Method B cleanup levels.

▪ **Baghouse Dust Designation**

The PLPs shall collect two representative composite samples from areas where baghouse dust from the Spokane Steel Foundry operation were disposed. The samples shall be tested according to the requirements of WAC 173-303-100(5)(c) Toxic Criteria and WAC 173-303-110(3)(b) Biological Testing Method.

▪ **Soil Samples**

The PLPs shall collect additional soil samples, if necessary, to help evaluate the nature and extent of contaminated soils based on existing data. Existing and supplemental soils data will be used to confirm contaminant concentrations above or below MTCA cleanup levels (WAC 173-340-700). Soil sampling requirements will be determined following collection and analysis of one to two quarters of ground water sampling and designation testing of baghouse dust.

Requirements of Task III include submittal of a Sampling and Analysis Plan and submittal of laboratory analysis during the field investigation phase. The scope of the Task III deliverable requirements are as follows:

A. **Sampling and Analysis Plan**

The PLPs shall prepare a Sampling and Analysis Plan for use during all site characterization studies. Sampling and Analysis Plans shall contain:

1. **Field Sampling and Testing Plans**

This plan will describe in detail the sampling, testing, and data gathering methods, locations, frequency and other field study procedures that will be used for obtaining data required to complete the RI/FS. The Sampling and Testing Plan will include the following:

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- Tasks and schedules;
- Specific sampling/testing protocols and procedures;
- Sampling/testing types, locations, designations, and frequency;
- Analytical procedures, methods, and detection limits;
- Field measurements including pH, temperature, specific conductance, turbidity, and water level;
- Equipment and procedures;
- Sample custody procedures, including holding times, container requirements, treatment, and preservation;
- Access considerations;
- Decontamination procedures;
- Subcontractors;
- Field QA/QC samples;
- Laboratory generated QA/QC samples; and
- Data reduction, validation, and reporting.

2. Health and Safety Plan

Prepare and follow a site-specific Health and Safety Plan in accordance with all applicable Occupational Safety and Health Administration (OSHA) and Washington Department of Labor and Industries, Division of Industrial Safety and Health (WISHA) worker protection requirements. The Health and Safety Plan shall address the following:

- Level of protection;
- Hazard evaluation;
- Waste characteristics;
- Special site considerations; and
- Emergency information.

DELIVERABLES: SAMPLING AND ANALYSIS PLAN - DRAFT
SAMPLING AND ANALYSIS PLAN - FINAL

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B. Conduct field sampling

The PLPs shall conduct the required investigations at the facility according to the requirements specified in the Sampling and Analysis Plan. All sampling locations shall be documented in a log and identified on a detailed site map. Any changes in sample collections and/or analysis from the Sampling and Analysis Plan will be documented and included in the RI-1 Report.

The PLPs shall submit to Ecology, within 60 days after the samples are submitted to the laboratory, the results of the analysis. The results of the laboratory analysis will also be reported and evaluated in the RI-1 report and raw data analytical summary sheets and data validation reviews shall be included in the report appendices.

DELIVERABLES: LABORATORY ANALYSIS RESULTS

TASK IV. ARARS Analysis

Identify Applicable State and Federal Laws for cleanup of the Facility in accordance with WAC 173-340-710.

TASK V. Baseline Cleanup Levels/Risk Assessment Analysis

Perform a baseline MTCA cleanup levels analysis/baseline risk assessment characterizing the current and potential threats to public health and the environment that may be posed by hazardous substances at the facility. The assessment will integrate cleanup standards and risk assessment as required by WAC 173-340-350(6)(d) and WAC 173-340-708. The analysis shall include:

- Identification of chemicals of concern;
- Exposure Assessment;
- Toxicity Assessment;
- Risk Characterization, to include discussion of applicable standards or criteria; and
- Identification of cleanup levels as per Chapter 173-340 WAC.

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TASK VI. Remedial Investigation - Phase 1 Report

The RI-1 Report (Report) will present the results of RI-1 Tasks I, III, and IV. The report will provide a facility characterization, describe the nature and extent of contamination, and evaluate the potential threat to human health and the environment from Task V. The Report will also provide recommendations for additional data needs, identification of preliminary Remedial Action alternatives and/or a "No Further Action."

The Report shall include but not be limited to the following elements:

A. Facility/Site Characterization

1. Background history and description of ownership and operation, waste generation and disposal activities at the facility, including interviews with former employees and owners, approximate dates of disposal activities, and maps.
2. Hydrogeology
 - a. A description of the regional and facility specific geologic and hydrogeologic characteristics affecting ground water flow beneath the facility, including:
 - i) Regional and facility specific stratigraphy;
 - ii) Regional and facility specific ground water flow patterns; and
 - iii) Characterization of seasonal variations in the ground water flow regime.
 - iv) Estimated hydraulic conductivity and porosity based on existing well logs and other general information available;
 - v) A description of manmade influences that may affect the hydrogeology of the site (schedules and volumes of production for local water supply wells, pipelines, drains, ditches, septic tanks, etc.).

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- b. Based on available field data, tests, and cores, a representative and accurate classification and description of the hydrogeologic units which may be part of the migration pathways at the facility including saturated and unsaturated units.
 - c. The potential contaminant solute attenuation capacity and mechanisms of the natural earth materials, if appropriate.
- 3. Maps depicting the following:
 - a. General geographic location;
 - b. Property lines, with the owners of all adjacent property clearly indicated;
 - c. Topography and surface drainage;
 - d. All past and present known or suspected hazardous substance disposal areas;
 - e. A series of all historical aerial photographs that may be obtained from public sources;
 - f. Surrounding land uses (residential, commercial, agricultural, recreational) and zoning; and
 - g. The location of all ground water supply and monitoring wells within a one mile radius. These wells shall be clearly labeled and ground surface and top of casing elevations and construction details included.

All maps shall be consistent with the requirement set forth in WAC 173-340-840(4) and be of sufficient detail and accuracy to locate and report all current and future work performed at the site.

B. Nature and Extent of Contamination

The PLPs shall prepare an assessment and description of the existing degree and extent of contamination. This should include:

- 1. A summary of all possible source areas of contamination. This at a minimum should include all waste disposal areas and other suspected source areas of contamination. For each area, the PLPs shall identify the following:

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- a. Location of area (which shall be depicted on a Facility map);
 - b. Hazardous substances, to the extent known; and
 - c. Waste characteristics
 - i. Type, quantity and chemical composition of wastes placed in the area.
 - ii. Physical and chemical characteristics of the waste.
 - iii. Migration and dispersal characteristics of the waste, as applicable.
 - iv. Regulatory designation of hazardous substances.
2. The PLPs shall compile analytical data on soils, at the facility. Data shall include time and location of sampling, media sampled, and contaminant concentrations. The PLPs shall address the following types of contamination at the facility:
 - a. Soil contamination including: vertical and horizontal extent of contamination, contaminant concentrations, and a description of the contaminant and soil chemical properties and interaction.
3. The PLPs shall compile analytical data on ground water at the facility. Data shall include time and location of sampling, and chemical concentrations. All analytes quantified as well as tentatively identified compounds shall be reported.
4. The PLPs shall report data and summarize the results of the Dangerous Waste Designation testing for baghouse dust. The locations where the samples were taken and type of analysis should be specified.

C. ARAR's Analysis

The RI report shall present the results of the ARARs analysis in TASK IV.

D. Baseline Cleanup Levels/Risk Assessment Analysis

The RI-1 report shall present the results of the baseline cleanup levels analysis in TASK V.

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E. Discussion and Recommendations

1. The report should provide a discussion of the investigation results that will support final recommendations. The discussion should include:
 - a. Nature of the contamination;
 - b. Extent of the contamination, including volume of material needing remediation;
 - c. The pathways by which contamination reached or can reach the media; and
 - d. Known or potential hazards and risks to the public health, welfare, and the environment, including physical hazards.
2. Recommendations should be provided identifying additional data requirements, preliminary remedial action alternatives, and/or "No Further Action".

F. Appendices to the report shall contain full documentation of investigative activities and analytical results. These appendices shall include:

1. General field observation support data, including:
 - a. Ground water characterization, including flow (maps);
 - b. Location of nearby wells and well log information.
2. Changes in sample collections from sample plan, including:
 - a. Opportunity samples; and
 - b. Other changes.
3. Sample location map, including:
 - a. Approximate distances;
 - b. Sample media; and
 - c. Sample numbers.
4. Table of results;
5. Supporting maps and figures identifying contaminant concentrations, including field sampling results;

DELIVERABLES: REMEDIAL INVESTIGATION - PHASE 1 REPORT - DRAFT
REMEDIAL INVESTIGATION - PHASE 1 REPORT - FINAL

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SCHEDULE OF DELIVERABLES

<u>DELIVERABLE</u>	<u>DUE DATE</u>
Effective Date of Agreed Order	Start
TASK I Preliminary Background Report - Draft	120 days after start
TASK II Public Participation Plan - Draft	30 days after start
Public Participation Plan - Final	30 days after Ecology approval of draft
TASK III Sampling and Analysis Plan - Draft	30 days after start
Sampling and Analysis Plan - Final	30 days after Ecology approval of draft
Laboratory Analysis Results	60 days after sampling submittal to laboratory
TASK VI Remedial Investigation - Phase I Report - Draft	18 months after start
Remedial Investigation - Phase I Report - Final	30 days after Ecology approval of draft